# Chapter NR 445 CONTROL OF HAZARDOUS POLLUTANTS

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NR 445.01 Applicability; purpose. (1) APPLICABILITY. (a) This chapter applies to all air contaminant SOURCEs which may emit hazardous pollutants and to their owners and operators. The emission limitations and control requirements of this chapter do not apply to a SOURCE of a hazardous air contaminant regulated under chs. NR 446 to 449 for the specific hazardous air contaminants regulated under those chapters or to a SOURCE which must meet a national emission standard for a hazardous air pollutant promulgated under section 112 of the act (42 USC 7412) for the specific air pollutant regulated under that standard.

- (b) Notwithstanding par. (a), after the effective date of emission limitations of this chapter, a **SOURCE** of hazardous air pollutants subject to a national emission standard under section 112 of the act shall continue to comply with the provisions of this chapter provided this is allowed by regulations promulgated under section 112 of the act.
- (2) PURPOSE. This chapter is adopted under ss. 285.11, 285.13, 285.17 and 285.27, Stats., to establish emission limitations for hazardous pollutants.

**NR 445.02 Definitions.** The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter and in chs. NR 446 to 469 449:

- (1) "Approved material safety data sheet" means a material safety data sheet which meets the reporting requirements of the superfund amendments reauthorization act of 1986 (42 USC 9671 to 9675) or regulations of the occupational safety and health administration under 29 CFR 1910.1200(g), as in effect on February 1, 1998.
- (2) "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite and actinolite-tremolite.
- (3) "Beryllium" means the element beryllium. Where weights or concentrations are specified, such weights or concentrations apply to beryllium only, excluding the weight or concentration of any other elements.
- (4) "Best available control technology or BACT" means an emission limit for a hazardous air contaminant based on the maximum degree of reduction practically achievable as specified by the department on an individual case-by-case basis taking into account energy, economic and environmental impacts and other costs related to the **SOURCE**.
- (5) "Downwash minimization stack height" means a stack height equal to (H+1.5D) where H is the height of the structure and D is the lesser of the structure height or structure cross-wind horizontal dimension in the immediate vicinity of the stack.
  - (5g) "Facility" has the meaning given in NR 400.02(63)
  - (5m) "Gasoline dispensing facility" has the meaning given in NR 400.02(73)
- (6) "Hazardous air contaminant" means any air contaminant for which no ambient air quality standard is set in ch. NR 404 and which the department determines may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or may pose a significant threat to human health or the environment. The term hazardous air contaminant includes, but is not limited to, the substances listed in Tables A to 5 C in s. NR 445.04.
- (7) "Indoor fugitive emissions" means an air contaminant present in a an enclosed workplace and which is emitted to the ambient air from general ventilation SOURCEs could not practicably pass through a stack, chimney, vent or other functionally equivalent opening.

(7m) "Laboratory" has the meaning given in NR 400.02(90)

(8) "Lowest achievable emission rate or LAER" means the rate of emission of a hazardous air contaminant which reflects the more stringent of the following:

- (a) The most stringent emission limitation for the hazardous air contaminant which is contained in the air pollution regulatory program of any state for this class or category of **SOURCE**, unless an applicant for a permit demonstrates that this limitation is not achievable; or
- (b) The most stringent emission limitation for the hazardous air contaminant which is achieved in practice by the class or category of **SOURCE**.
- (9) "Mercury" means the element mercury, excluding any other elements, and includes mercury in particulates, vapors, acrosols and compounds.
  - (9) "Manufacturer, Processor and Treatment and Disposal" means......
  - (9m) "Modification" has the meaning given in NR 400.02(99)
- (9g) "Reference concentration" means a verified reference concentration developed by the United States environmental protection agency which is an estimate of an exposure of the human population, including sensitive subgroups, to a hazardous air contaminant that is likely to be without an appreciable risk of deleterious effects during a lifetime. A reference concentration is based on continuous inhalation exposures to the hazardous air contaminant and is expressed in units of micrograms per cubic meter ( $\mu$ g/m³).
- (9m) "Reference method" means any method of sampling and analyzing for an air pollutant as described in 40 CFR part 61, Appendix B, incorporated by reference in s. NR 484.04.
- (10) "Refuse derived fuel" means municipal solid waste which has undergone a process to, at a minimum, remove hazardous waste, minimize metals, glass and other non-combustible material; and has been processed for use as a fuel. Refuse derived fuel does not include tires, tire fragments, waste oils, waste solvents, and other material not normally contained in household solid waste.
- (10m) "Stationary **SOURCE**" means any facility, building, structure or installation that directly or indirectly emits or may emit an air contaminant only from a fixed location. A stationary **SOURCE** includes an air contaminant **SOURCE** that is capable of being transported to a different location. A stationary **SOURCE** may consist of one or more pieces of process equipment, each of which is capable of emitting an air contaminant. A stationary **SOURCE** does not include a motor vehicle or equipment which is capable of emitting an air contaminant while moving.
- (11) "Virgin fossil fuel" means any solid, refined liquid or refined gaseous fossil fuel with a Btu content greater than 7,000 Btu/lb which is not blended with reprocessed or recycled fuels. Group 1 virgin fossil fuels consist of natural gas, liquid petroleum gas, distillate fuel oil, gasoline and diesel fuel. Group 2 virgin fossil fuels consist of coal, and residual fuel oil.
- NR 445.03 General limitations. No person may cause, ALLOW or permit emissions into the ambient air of any hazardous substance in a quantity, concentration or duration which is injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables A to 5 C of s. NR 445.04.

NR 445.04 Emission thresholds, standards and control requirements

[NEED TRANSITIONARY REQUIREMENTS TO ENSURE CONTINUING COMPLIANCE WITH EXISTING REGULATION.]

- (1) STATIONARY SOURCES. Except as provided in s. NR 445.05,
- (a) No owner or operator of a stationary **SOURCE** may cause, **ALLOW** or permit emissions from a **SOURCE** of a hazardous air contaminant listed in Table A in such quantity or duration as to cause an ambient air concentration off the **SOURCE**'s property which exceed the ambient air standard in column (f) of Table A for the hazardous air contaminant.
- (b) Any owner or operator of a **SOURCE** subject to sub. (a) may request<sup>1</sup> an alternative emission standard of ten percent of the threshold limit value time weighted average established by the American conference of governmental industrial hygienists, in the threshold limit values and biological exposure indices for 2000, incorporated by reference in s. NR 484.11, for any contaminant with a 24-hour averaging period in column (g) of Table A if:
  - 1. The hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period.
- 2. The department determines that after complying with s. NR 445.08(1) such limits will not pose a threat to public health or welfare.
- (c) The owner or operator of any stationary **SOURCE** which **EMITS** any contaminant with a control requirement in column (h) of Table A in an amount greater than those listed in column (c), (d) or (e) of Table A shall control emissions of those hazardous air contaminants to a level which is identified in column (h) of the table as either:
  - 1. The lowest achievable emission rate (LAER)
  - 2. The best available control technology (BACT).
- (d) The control requirements in sub. (c)1. and 2. shall be met by the emissions unit at the **SOURCE** which **EMITS** the greatest amount of the hazardous air contaminant. If application of the control requirement to this emissions unit does not reduce **SOURCE** emissions of the hazardous air contaminant to a level less than their respective rates listed in column (c), (d) or (e) of Table A for the hazardous air contaminant, then the control requirement shall be met by other emissions units at the **SOURCE** which emit decreasingly smaller amounts of the hazardous air contaminant until emissions from the **SOURCE** are below the emission rates listed in column (c), (d) or (e) of Table A or until all emissions units at the **SOURCE** which emit at least 10% of the rates listed in column (c), (d) or (e) of Table A for the hazardous air contaminant have met the control requirement. If application of the control requirement to these emissions units does not result in the control of at least 50% of the potential emissions of the hazardous air contaminant from the **SOURCE**, then the department may require application of the control requirement on a reasonable array of smaller emissions units which emit the hazardous air contaminant. Pollution prevention and material substitution efforts may be considered in meeting this control requirement.
- (2) Manufacturers, Processors and Treatment and Disposal of Pesticides, Rodenticides, Insecticides, Herbicides or Fungicides. Except as provided in s. NR 445.05(3) and (4),
- (a) No owner or operator of a stationary **SOURCE** may cause, **ALLOW** or permit emissions from a **SOURCE** of a hazardous air contaminant listed in Table B in such quantity or duration as to cause ambient air concentrations off the **SOURCE**'s property which exceed the ambient air standards in column (f) of Table B for the respective hazardous air contaminants.

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<sup>&</sup>lt;sup>1</sup> [General procedure on how to request alternative emission standard inserted here.]

- (b) The owner or operator of any **SOURCE** which **EMITS** any contaminant with a control requirement in column (h) of Table B in an amount greater than those listed in column (c), (d) or (e) of Table B shall meet the requirements of sub. (1)(c) and (d) for those contaminants.
- (c) Any owner or operator of a **SOURCE** subject to this section shall also comply with sub. (1) of this section.
  - (3) MANUFACTURERS PROCESSORS AND TREATMENT AND DISPOSAL OF PHARMACEUTICALS. Except as provided in s. NR 445.05(3) and (4),
- (a) The owner or operator of any **SOURCE** which **EMITS** any contaminant with a control requirement in column (h) of Table C in an amount greater than those listed in column (c), (d) or (e) of Table C shall meet the requirements of sub. (1)(c) and (d) for those contaminants.
- (b) Any owner or operator of a **SOURCE** subject to this section shall also comply with sub. (1) of this section.
- (4) INCINERATORS. (a) Any owner or operator of a stationary **SOURCE** which combusts municipal solid waste as defined in s. NR 500.03(150) or infectious waste shall comply with sub. (1)(a) and shall control emissions of hazardous air contaminants having a control requirement in column (h) in Table A or Table C subject to control requirements to a level which is the lowest achievable emission rate.
- (b) A **SOURCE** which combusts refuse derived fuel in a boiler and obtains less than 50% of its heat input from the refuse derived fuel is not subject to this subsection.
  - (5) WOOD COMBUSTION.

[INSERT WOOD COMBUSTION LANGUAGE HERE]

Table A Emission Thresholds, Standards and Control Requirements for All SOURCES

Hazardous Air Contaminant	Chemical Abstract System #	Thresholds (pounds per averaging time) for emission points			Ambient Air Standard (per averaging	Averaging Time for Standard and	Control Requirement
		<25 feet	25 to <75	≥75 feet	time expressed as micrograms / cubic meter)	Threshold	Kequii ement
(a)	<b>(b)</b>	(c)	( <b>d</b> )	(e)	<b>(f)</b>	<b>(g)</b>	<b>(h)</b>
Acetaldehyde	75-07-0	3.36	10.7	55.3	4,504	1-hour	
		808	3,318	27,845		Annual	BACT
Arsenic and inorganic compounds, as As	7440-38-2	0.413	1.698	14.25		Annual	LAER

**Table B** Emission Thresholds, Standards and Control Requirements for Manufacturers, Processors and Treatment and Disposal of Pesticides, Rodenticides, Insecticides, Herbicides or Fungicides

Hazardous Air Contaminant	Chemical Abstract	Thresholds (pounds per averaging time) for emission points			Ambient Air Standard (per averaging time expressed	Averaging Time for Standard and	Control Requirement
	System #	<25 feet	25 to <75	≥75 feet	as micrograms / cubic meter)	Threshold	•
(a)	<b>(b)</b>	(c)	( <b>d</b> )	(e)	<b>(f)</b>	(g)	<b>(h)</b>
Aldin	309-00-2	0.0134	0.0522	0.405	6	24 hour	
		0.244	0.947	7.361	109	24 hour	
1,3-Dichloropropene	542-75-6	444	1,825	15,315		Annual	BACT
		3,554	14,600	122,517	20	Annual	

Table C Emission Thresholds and Control Requirements for Manufacturers, Processors and Treatment and Disposal of Pharmaceuticals

Hazardous Air Contaminant	Chemical Abstract	Thresholds (pounds per averaging time) for emission points			Ambient Air Standard (per averaging	Averaging Time for Standard and	Control
	System #	<25 feet	25 to <75	≥75 feet	as micrograms / cubic meter)	Threshold	Requirement
(a)	<b>(b)</b>	(c)	( <b>d</b> )	(g)	<b>(f)</b>	<b>(g)</b>	( <b>h</b> )
Adriamycin	23214-92-8	10	10	10		Annual	BACT
Azathioprine	446-86-6	3.484	14.31	120.1		Annual	LAER

#### NR 445.05 Exempt emissions

- (1) Emissions from the combustion of group 1 virgin fossil fuels.
- (2) Emissions from the combustion of group 2 virgin fossil fuels vented from a stack which has downwash minimization stack height or a height approved by the department.
  - (3) Emissions from a laboratory.
- (4) Indoor fugitive emissions which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental and industrial hygienists in the threshold limit values and biological exposure indices for 2000, incorporated by reference in s. NR 484.11, and for which the SOURCE demonstrates to the department that it is in compliance with applicable occupational safety and health administration requirements.<sup>2</sup>
- (5) Emissions from any gasoline dispensing facility which meets the requirements of s. NR 420.04(3)(b) to (i) and which dispenses less than 2 million gallons of gasoline a year or can otherwise demonstrate to the satisfaction of the department that it will not exceed an emission limitation for a Table 1 hazardous air contaminant.
- (6) Emissions from any gasoline dispensing facility which does not meet the requirements of s. NR 420.04(3)(b) to (i) and which dispenses less than 1.25 million gallons of gasoline a year or can otherwise demonstrate to the satisfaction of the department that it will not exceed an emission limitation for a Table 1 hazardous air contaminant.
  - (7) Emissions of amorphous and crystalline silica under study per sec. NR 445.09.
  - (8) [Insert wood combustion language here]

**UNOFFICAL TEXT** 

<sup>&</sup>lt;sup>2</sup> For purposes of this subsection, compliance with the applicable occupational safety and health administration requirements must include language regarding worker exposure. Showing can be made by source. Does not have to be an official OSHA inspection.

#### NR 445.06 Compliance requirements

(1) COMPLIANCE DEMONSTRATION.

For the purpose of determining compliance with s.NR 445.04:

- (a) The department shall allow credit for the emission reduction capability of in-place control devices.
- (b) The owner or operator of a **SOURCE** may demonstrate compliance with emission standards expressed as ambient air concentrations in Table A or B or 3 by demonstrating 3 that the concentration of the substance in Table A or B or 3 in the stack is less than the ambient concentration allowed under column (f) of the table.
- (c) The owner or operator of a **SOURCE** is not required to consider emissions resulting directly from naturally occurring constituents in windblown soil.
- (d) The owner or operator of a **SOURCE** may rely on information on an approved material safety data sheet if the approved material safety data sheet lists a hazardous air contaminant listed in Tables A to C and the hazardous air contaminant with standards expressed as ambient air concentrations in Table A, B, or C constitutes 10,000 parts per million or more of the material or for hazardous air contaminants with standards expressed as control requirements constitutes 1,000 parts per million or more of the material. If an approved material safety data sheet for a material is not classified as proprietary and does not list a hazardous air contaminant in Tables A to C at or above the amounts listed in this subdivision, that material will be presumed not to result in emissions of a hazardous air contaminant unless a hazardous air contaminant is formed in processing the material.
- (e) The owner or operator of a **SOURCE** may rely upon mass balance or other use, consumption and analytical methodologies for calculating potential emissions. However, the department may require that a stack test be conducted to affirm the accuracy of emission estimations.
- (f) [Modeling demonstration] The owner or operator of a **SOURCE** may rely on information generated by either the US EPA screening or refined dispersion model to demonstrate that **potential** emissions of a hazardous air contaminant will not exceed the ambient standard in column (f) of Table A or B or with the provisions of par. (g). If a **SOURCE** elects to use the screening model for purposes of demonstrating compliance then [IT MUST FOLLOW THE PROCEDURES SET FORTH IN THE SEPTEMBER 11, 2000 MEMO].
- (g) [Risk based demonstration] The owner or operator of a **SOURCE** may demonstrate an alternative means of complying with the control requirements in subs. NR 445.04(1)(c), (2)(b) or (3)(a) by showing that:
- 1. For hazardous air contaminants with control requirements in Tables A, B or C having a US EPA unit risk factor, **potential** emissions from all **SOURCE**s <sup>4</sup> are not released in such quantity or duration as to cause an ambient air concentration off the **SOURCE**'s property which may cause a cumulative impact greater than 1 in 100,000<sup>5</sup> and;
- 2. For hazardous air contaminants with control requirements in Tables A, B or C not having a US EPA unit risk factor, **potential** emissions from all **SOURCE**s are less than 10 pounds per year for each contaminant.
- (h) [Elective emission limitations] The owner or operator of a **SOURCE** may demonstrate compliance with standards and control requirements in subs. NR 445.04(1), (2) or (3) or the alternative compliance demonstration in par. (g) by electing to limit **potential** emissions:
  - 1. Below relevant thresholds in columns (c), (d) or (e) of Tables A, B or C.
  - 2. To a level needed to satisfy the conditions in par. (g).

<sup>&</sup>lt;sup>3</sup> This demonstration must be done under whatever conditions would be allowed by permit or order or at PTE.

<sup>&</sup>lt;sup>4</sup> Description of all sources (exempt, fugitive, etc) needs to be added here

<sup>&</sup>lt;sup>5</sup> This number is determined using the following calculation:

 $<sup>\</sup>Sigma$  (individual impacts (microgram/cubic meter)<sub>annual average</sub> x US EPA Unit Risk Factor) x 100,000

Any limitation elected under this paragraph shall be placed in a permit or general or special order. [INSERT APPROPRIATE PERMIT LANGUAGE HERE]

- (i) [Quantification issues Language may be developed]
- (j) [Risk screening in BACT & LAER reviews Language may be developed]
- (k) The owner or operator of a **SOURCE** which has achieved compliance with sub. (4r)(a) an emission standard based on it's reference concentration prior to [insert effective date of rule] may not be required to meet additional requirements under this section s. NR 445.04(1) for a hazardous air contaminant having an ambient standard with an annual averaging time in column (g) of Table A if the reference concentration, as listed in Table 5 of s. NR 445.04, is amended for that contaminant is revised after the effective date of a national emission standard applicable to the **SOURCE** which is promulgated under section 112 of the act (42 USC 7412) for that hazardous air contaminant.
  - (2) COMPLIANCE SCHEDULES.

#### [Need Transitionary Schedule to Ensure Continuing Compliance with Existing Regulation]

- (a) **SOURCE**s subject to the emission standards in s. NR 445.04 and constructed or last modified on or after [effective date of rule] shall demonstrate compliance upon startup.
- (b) **SOURCE**s constructed or last modified prior to [effective date of rule] with **potential, non-exempt** emissions of a hazardous air contaminant **less** than the applicable threshold in columns (c), (d) or (e) shall maintain records in accordance with s. NR 439.04(1) and (2).
- (c) **SOURCE**s constructed or last modified prior to [effective date of rule] with **potential, non-exempt** emissions of a hazardous air contaminant **greater** than the applicable threshold in columns (c), (d) or (e) shall:
  - 1. Demonstrate compliance with applicable standard [no later than 36 months after effective date of rule].
- 2. For **SOURCE**s required to obtain an operation permit under s. NR 407.04, the demonstration shall be submitted on the application forms required for an operation permit, an amendment to an application, renewal of the operation permit, or for a significant revision under s. NR 407.13.
- 3. For **SOURCE**s not required to obtain an operation permit, the demonstration shall be submitted according to the certification process in par. (4).
  - (3) COMPLIANCE EXTENSIONS.
- 1. The department may, at the request of the owner or operator of a **SOURCE**, grant an extension of any compliance deadline in par. (a), (am) or (bm) (c) for a period not to exceed 6 months.
- 2. Subsequent requirements. The owner or operator of a **SOURCE** which has achieved compliance with this section chapter by installing emission control equipment may not be required to install additional control equipment to achieve compliance with this section chapter for a period of 10 years after the installation of the control equipment or the useful life of the control equipment as determined by the department, whichever is less. For the purposes of this paragraph, increasing stack height, other dilution measures, or material reformulation may not be construed as installation of emission control equipment. Material reformulation which requires substantial capital expenditures for process equipment which was made with prior department approval and which results in a reduction of emissions of hazardous air contaminants which is sufficient to comply with the limitations of this section chapter may be construed as installation of emission control equipment under this paragraph.

(4) CERTIFICATION PROCESS

#### [LANGUAGE FOR A CERTIFICATION PROCESS IS BEING DEVELOPED AND WOULD BE INSERTED HERE.]

NR 445.07 **Variance**. (a) (1) The owner or operator of a **SOURCE** may apply for and the department may grant a variance from an emission limitation of sub. (3)(a), (4r)(a) or (5) s. NR 445.04(1)(a) for a contaminant having an ambient air standard based on an annual averaging time, or the control requirements of s. NR 445.04(1)(c)1., or (4) if the applicant demonstrates to the satisfaction of the department that applicable provisions under par. (b) or (c) (a) or (b) are met. The department shall publish a notice of, and hold a public hearing on, any preliminary determination to approve a variance request under this subsection. The department shall grant or deny a variance request within 90 business days after the close of the public comment period on the request. The department shall review any variance granted under this subsection on a 5 year basis. Following its review and after notice and an opportunity for a public hearing and public comment, the department may modify, extend or rescind the variance.

- (b) (a) An applicant for a variance from the emission limitation of sub. (3)(a) or (5) the control requirements of s. NR 445.04(1)(c)1., or (4) shall demonstrate all of the following to the satisfaction of the department:
  - 1. Compliance with sub. (3)(a) or (5) s. NR 445.04(1)(c)1., or (4) would be economically infeasible.
- 2. Residual emissions of the hazardous air contaminant in question would not cause significant harm to the environment or public health.
  - 3. The **SOURCE**'s emissions are controlled to a level which is the best available control technology.
- (c) (b) An applicant for a variance from the emission limitation of sub. (4r)(a) s. NR 445.04(4) shall demonstrate all of the following to the satisfaction of the department:
- 1. All direct or portable **SOURCE**s owned or operated in the state by the owner or operator of the air contaminant **SOURCE** for which a variance is requested are in, or are on a schedule for, compliance with all applicable requirements of chs. NR 400 to 499.
- 2. The emission limitation from which variance is sought is technologically or economically infeasible to meet due to conditions or special circumstances at the **SOURCE**, including adverse environmental or energy impacts.
- 3. Residual emissions of the hazardous air contaminant in question under the emission limitations proposed for inclusion in the variance would not cause significant harm to public health.
- 4. Good faith efforts have been made to comply with sub. (4r)(a) s. NR 445.04(4) and all reasonably available alternative operating procedures and interim control measures to minimize emissions of the hazardous air contaminant will be utilized during the duration of the variance.
- (2) The department shall consult with the department of health and family services to determine that residual emissions would not cause significant harm under par. (1)(a)2. and (b)3. prior to establishing an emission limitation in a permit or order under this section.
- (3) Application for a variance under this section shall be submitted on the application forms required for a construction permit, an operation permit, an amendment to an application, renewal of the operation permit, or for a significant revision under s. NR 407.13.

[ALL VARIANCES WILL BE HANDLED THROUGH THE PERMIT PROCESS.]

NR 445.068 Hazardous air contaminant review. (1) The department staff shall consult with the department of health and social family services prior to incorporating an emission limit under s. NR 445.04(1)(a)2. or 445.05(1)(a)2. (1)(b) in an order or a permit.

- (2) The department shall, after consultation with the department of health and social services, submit a report to the natural resources board which contains recommended acceptable ambient concentrations for the hazardous air contaminants listed in Table 4 of s. NR 445.04 by October 1, 1990. Unless a specific acceptable ambient concentration is recommended for a hazardous air contaminant, the acceptable ambient concentration for each hazardous air contaminant shall be the limits specified in s. NR 445.05(4)(a) and (b).
- (3) (2)(a) The department shall monitor changes in the classifications of hazardous air contaminants in Tables 1 to 5 of s. NR 445.04 as reported by the American conference of governmental industrial hygienists, the United States environmental protection agency, the international agency for research on cancer, and the national toxicology program and shall prepare rule modifications to the tables to incorporate these changes according to the schedule in par. (c).
- (b) The department shall presume that any hazardous air contaminant which is included on a list of known or suspected carcinogens by both the international agency for research on cancer and the national toxicology program is a hazardous air contaminant which should be listed in Tables A, B or C with a control requirement. This presumption may be overcome for adding or removing contaminants to or from Tables A, B or C if the greater weight of evidence demonstrates the presumption is incorrect.
- (c) [BIENNIAL PROCESS TO UPDATE NR 445] Beginning [2 years after effective date of rule] and every two years thereafter, the department shall:
- 1. Develop<sup>6</sup> and submit a the list of changes monitored under par. (a) to a committee of affected industry, public health officials and other interested parties.
  - 2. Identify and establish special studies as needed.
- (4) (3) The department staff shall consult with the department of health and social family services prior to establishing an emission limit, in a permit or order, for any hazardous air contaminant which is not listed in Table A, B, or C or 4 of s. NR 445.04 or in threshold limit values and biological exposure indices for 1990-1991 2001 adopted by the American conference of governmental industrial hygienists, incorporated by reference in s. NR 484.11.
- (5) The department staff shall, with the cooperation of affected industrial and municipal wastewater treatment facilities, by October 1, 1990, undertake and complete a study of the types and quantities of hazardous air contaminants emitted from wastewater treatment facilities and emission control techniques applicable to hazardous air contaminants emitted from wastewater treatment facilities. The department staff shall submit a report of its study to the natural reources board by January 1, 1991.
- (5) **[HAPs > 99 ppm]** The department shall monitor **SOURCE**s of emission of [contaminants in NR 438 having threshold limit values greater than 99 ppm, established by the American conference of governmental and industrial hygienists in the threshold limit values and biological exposure indices for 2000, incorporated by reference in s. NR 484.11]. If the department determines that emissions are of such quantity, concentration or duration that are potentially injurious to human health, they shall establish a limitation in a permit or order that will ensure the **SOURCE** does not cause concentrations off of the **SOURCE**'s property which exceed two and four tenths percent of the threshold limit value-time weighted for any consecutive 24-hour averaging period.
- (6) [WATCHLIST SUMMARY REPORT PLACEHOLDER] The department shall periodically prepare a report summarizing their effort to monitor and encourage voluntary reduction of emissions of hazardous air contaminants not listed in Tables A, B or C.

<sup>&</sup>lt;sup>6</sup> This list will be developed using the decision criteria......

**NR 445.09 Hazardous air contaminant special studies.** (1) The department staff shall, with the cooperation of affected industry, public health officials and other interested parties, undertake and complete a study of the emissions of [type] silica by [24 months after effective date of rule]. The study shall include an inventory of **SOURCE**s and amount of emissions of silica, strategies to manage emissions, control technologies and costs.

(2) By [30 months after effective date of rule] department staff shall prepare rule modifications to establish threshold levels, compliance requirements and schedules.

**NR 445.0710 Hazardous air contaminant limitations.** The department may establish emission limitations for hazardous air contaminants for **SOURCE**s in permits or general or special orders issued by the department.

#### NR 445.0811 Notice of hazardous substance air spills. (1) DISCHARGE NOTIFICATION.

- (a) Unless the discharge is specifically exempted under (b) or NR 706.07(1) or NR 706.07(2), p Persons possessing or controlling a hazardous substance shall immediately notify the department of any hazardous emission substance discharges not in conformity with a permit or allowed by the department under chs. NR 400 to 499. For the purpose of determining if a substance is hazardous and whether its discharge is required to be reported, responsible parties shall consider the quantity, concentration and physical, chemical and infectious characteristics of the substance and the location where the discharge occurred, and whether the substance has been discharged to the environment. A hazardous substance that is "discharged" into a secondary containment structure, that is completely contained and can be recovered with no discharge to the environment, is not subject to the discharge notification requirements in s. 292.11 (2), Stats. Notice shall be given as required by s. 292.11, Stats., and ch. NR 706.
  - (b) Exemption for chemicals listed in ch. NR 445, but not specifically exempted in ch. NR 706.
- 1. For a chemical listed in Tables A, B, or C with a 1 or 24 hour averaging time, the amount discharged in any 24 hour period is less than the amount listed in the threshold table.
- 2. For a chemical listed in Tables A, B, or C with an annual averaging time, the amount discharged in any 24 hour period is less than 10% of the amount.
  - 3. For chemicals listed in more than one table, the most restrictive amount applies.

Note: The 24–hour hotline operated by the division of emergency management in cooperation with the department can be reached at 1–800–943–0003. Directories for the telephone numbers of the department's offices can be found in local telephone books and in various department guidance documents.

Note: The department believes that the dictionary definition of "immediate", i.e. "occurring at once; next in line," does not lend itself to quantification. An across—the—board time—period can't be specified. In uncomplicated spill situations, responsible parties are expected to provide notice to the department within a matter of a few minutes after they learned of the spill. In other situations, especially where emergency action of some kind is being taken by the responsible party or where the responsible party does not have access to a telephone, notification may not be possible for several hours, but would still be considered "immediate" if promptly given.

Note: Notification requirements under this rule may not meet the obligations for responsible parties to report hazardous substance releases to the federal government. Questions on federal requirements should be directed to the US EPA Superfund hotline at 1–800–535–0202.

(c) In addition to emergency notification requirements as described above and in s. 292.11, Stats. and Ch. NR 706, the responsible party must keep written records that include descriptions of the air spill (date, time, location, duration, and description of how the spill occurred) and provide estimates of the amounts discharged to the environment. Facilities subject to reporting of emissions of chemicals listed in Ch. NR 438 shall include the amount of emissions resulting from the spill in their annual emissions reports to the department.